

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

Claim 1-48 (canceled)

Claim 49 (new): A composition comprising an isolated immunostimulatory sequence (ISS), and a pharmaceutically acceptable excipient wherein the ISS is less than about 200 nucleotides in length and comprises the formula:

5'-X₁ X₂ A X₃ C G X₄ T C G-3' (SEQ ID NO: 62)

wherein X₁ is T, G, C or Z, wherein Z is 5-bromocytosine;

wherein X₂ is T, G, A or U;

wherein X₃ is T, A or C;

wherein X₄ is T, G or U; and

wherein the ISS is selected from the group consisting of 5'-TCGTCGGAACCGTTCGGAATGA-3' (SEQ ID NO: 18); 5'-TGACTGTGAAZGTTZGAGATGA-3' (SEQ ID NO: 38); and 5'-TGACTGTGAACGTTCGAGATGA-3' (SEQ ID NO: 59).

Claim 50 (new): A composition comprising an isolated immunostimulatory sequence (ISS), and a pharmaceutically acceptable excipient wherein the ISS is less than about 200 nucleotides in length and comprises the formula:

5'-X₁ X₂ A X₃ C G X₄ T C G-3' (SEQ ID NO: 62)

wherein X₁ is T, G, C or Z, wherein Z is 5-bromocytosine;

wherein X_2 is T, G, A or U;

wherein X_3 is T, A or C;

wherein X_4 is T, G or U; and

wherein the ISS is selected from the group consisting of: SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 17, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, SEQ ID NO: 22, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 33, SEQ ID NO: 41, SEQ ID NO: 42, SEQ ID NO: 43, SEQ ID NO: 44, SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 55, SEQ ID NO: 59, and SEQ ID NO: 60.

Claim 51 (new): A composition comprising an isolated immunostimulatory sequence (ISS), and a pharmaceutically acceptable excipient wherein the ISS is less than about 200 nucleotides in length and comprises the formula:

5'- $X_1 X_2 A X_3 C G X_4 T C G$ -3' (SEQ ID NO: 62)

wherein X_1 is T, G, C or Z, wherein Z is 5-bromocytosine;

wherein X_2 is T, G, A or U;

wherein X_3 is T, A or C;

wherein X_4 is T, G or U; and

wherein the ISS is selected from the group consisting of: SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 23, SEQ ID NO: 24, SEQ ID NO: 25, SEQ ID

NO: 26, SEQ ID NO: 27, SEQ ID NO: 28, SEQ ID NO: 31, SEQ ID NO: 33, SEQ ID NO: 34, SEQ ID NO: 35, SEQ ID NO: 36, SEQ ID NO: 41, SEQ ID NO: 42, SEQ ID NO: 43, SEQ ID NO: 44, SEQ ID NO: 45, SEQ ID NO: 46, SEQ ID NO: 47, SEQ ID NO: 48, SEQ ID NO: 55, SEQ ID NO: 59, SEQ ID NO: 60.

Claim 52 (new): A composition comprising an isolated immunostimulatory sequence (ISS), and a pharmaceutically acceptable excipient wherein the ISS is less than about 200 nucleotides in length and comprises the formula:

5'-X₁ X₂ A X₃ C G X₄ T C G-3' (SEQ ID NO: 62)

wherein X₁ is T, G, C or Z, wherein Z is 5-bromocytosine;

wherein X₂ is T, G, A or U;

wherein X₃ is T, A or C;

wherein X₄ is T, G or U; and

wherein the ISS is selected from the group consisting of: SEQ ID NO: 2, SEQ ID NO: 18, SEQ ID NO: 35, SEQ ID NO: 38, SEQ ID NO: 59, SEQ ID NO: 60.

Claim 53 (new): A composition comprising an isolated immunostimulatory sequence (ISS), and a pharmaceutically acceptable excipient wherein the ISS is less than about 200 nucleotides in length and comprises the formula:

5'-X₁ X₂ A X₃ C G X₄ T C G-3' (SEQ ID NO: 62)

wherein X₁ is T, G, C or Z, wherein Z is 5-bromocytosine;

wherein X₂ is T, G, A or U;

wherein X_3 is T, A or C;

wherein X_4 is T, G or U; and

wherein the ISS is selected from the group consisting of: SEQ ID NO: 1, SEQ ID NO: 59, SEQ ID NO: 60, SEQ ID NO: 132.